

## 'You should be helping him, he's trying to do something about it'

Emmerson, Oliver; London, King's; Akhtar, Shabana; Lowe, Elizabeth; Day, Edward

*License:*

None: All rights reserved

*Document Version*

Publisher's PDF, also known as Version of record

*Citation for published version (Harvard):*

Emmerson, O, London, K, Akhtar, S, Lowe, E & Day, E 2018, 'You should be helping him, he's trying to do something about it': the dilemma of heroin use, agonist opioid treatment and employment', *Heroin Addiction and Related Clinical Problems*, vol. 20, no. 6, pp. 17-25.

[Link to publication on Research at Birmingham portal](#)

**Publisher Rights Statement:**

Checked for eligibility: 19/06/2019

This is the final published version of an article found in *Heroin Addiction And Related Clinical Problems*:  
<http://www.heroinaddictionrelatedclinicalproblems.org/about-us.php>

**General rights**

Unless a licence is specified above, all rights (including copyright and moral rights) in this document are retained by the authors and/or the copyright holders. The express permission of the copyright holder must be obtained for any use of this material other than for purposes permitted by law.

- Users may freely distribute the URL that is used to identify this publication.
- Users may download and/or print one copy of the publication from the University of Birmingham research portal for the purpose of private study or non-commercial research.
- User may use extracts from the document in line with the concept of 'fair dealing' under the Copyright, Designs and Patents Act 1988 (?)
- Users may not further distribute the material nor use it for the purposes of commercial gain.

Where a licence is displayed above, please note the terms and conditions of the licence govern your use of this document.

When citing, please reference the published version.

**Take down policy**

While the University of Birmingham exercises care and attention in making items available there are rare occasions when an item has been uploaded in error or has been deemed to be commercially or otherwise sensitive.

If you believe that this is the case for this document, please contact [UBIRA@lists.bham.ac.uk](mailto:UBIRA@lists.bham.ac.uk) providing details and we will remove access to the work immediately and investigate.



Pacini Editore & AU CNS

## Regular article

*Heroin Addict Relat Clin Probl* 2018; 20(6): 17-25

**HEROIN ADDICTION &  
RELATED CLINICAL  
PROBLEMS**

[www.europad.org](http://www.europad.org)  
[www.wftod.org](http://www.wftod.org)

# ‘You should be helping him, he’s trying to do something about it’: The dilemma of heroin use, agonist opioid treatment and employment

Oliver Emmerson<sup>1</sup>, Thomas Parkman<sup>2</sup>, Shabana Akhtar<sup>3</sup>, Elizabeth Lowe<sup>1</sup>, and Ed Day<sup>2,3,4</sup>

*1-College Medical and Dental Sciences, University of Birmingham, The Barberry, Birmingham, UK*

*2-Addictions Department, Institute of Psychiatry, Psychology & Neuroscience, King's College London, UK*

*3-Birmingham & Solihull Mental Health NHS Foundation Trust, Birmingham, UK*

*4-Solihull Integrated Addiction Service (SIAS), Solihull, UK*

## Summary

**Background:** Approximately 20% of people starting an episode of specialist drug treatment in England are in work, but few gain employment as treatment progresses. Although much has been written about the barriers to employment, less research has been conducted on people who do manage to work on agonist opioid treatment (AOT). This study set out to explore the interaction between heroin use, AOT and employment. **Methods:** We conducted semi-structured interviews with 10 individuals receiving AOT in full-time employment recruited from a community drug treatment centre in the English West Midlands. All interviews were transcribed, and data relating to employment, treatment and illicit drug use were systematically coded using the Iterative Classification process and subjected to thematic analysis. **Results:** AOT was considered an important factor in allowing this group to obtain full time employment, but the majority were still using some heroin. AOT and the income derived from working had allowed them to pick and choose when they used drugs, but their reliance on their income from employment meant that they couldn't devote significant time to detoxification and rehabilitation strategies. At the same time, promotion opportunities were limited by the perceived stigma of AOT. **Conclusions:** These findings suggest a different approach is required to help employed opiate users receiving AOT than for those who are unemployed. More work with employers to increase the understanding of AOT and overcome the stigma of drug use may be required.

**Key Words:** Opiate use; drug misuse; agonist opioid treatment; methadone; buprenorphine; employment

## 1. Introduction

The level of employment in the heroin dependent population in the UK has been subject to recent scrutiny in the light of the stated Government aims of treatment of ‘full recovery’ [3, 13]. Most definitions of recovery include participation in the rights, roles and responsibilities of society, and being able to undertake work in a paid or voluntary capacity is an important part of this [23]. Approximately 20% of people starting an episode of treatment in a specialist service are employed, and this group tend to stay employed throughout treatment. However, few gain employment through treatment services, and the outcomes are worst for opiate users [3].

The provision of Agonist Opioid Treatment (AOT) using methadone or buprenorphine was greatly expanded in the UK between 2001 and 2008, a policy underpinned by the extensive evidence base for its efficacy in reducing illicit opiate-related harms [2]. When AOT was first presented as a treatment strategy for opiate dependence in the 1960s, the process of prescribing methadone went hand-in-hand with efforts at psychosocial rehabilitation [5], and hence the low levels of people moving into employment are disappointing. A number of studies from around the world show that unemployment is common in opiate addicts [9, 19, 25, 26], and research has highlighted potential barriers to employment. These include lack of education and skills, mental and physical health

problems, social disadvantage, limited provision of support services, difficulty engaging with employers and support professionals, dealing with stigma and involvement in crime [1, 14, 22]

There is strong evidence that unemployment can cause, contribute to or aggravate adverse health outcomes including poorer physical health, poorer mental health and mortality [24]. Conversely, work can be beneficial for an employee's well-being, although this generally relies on good-quality supervision and favourable workplace conditions [16]. Employment is usually the most important means of obtaining adequate economic resources for material well-being, and in societies where employment is the norm work is central to individual identity, social roles and social status [24]. Finding employment is therefore central to attempts to incorporate a social reintegration focus into treatment for drug use problems [21], and a study of AOT in a primary care population in Sheffield found that the employed group had significantly better social functioning [18]. Work offers drug users a sense of responsibility, personal value, independence, security, dignity and a stake in society [7], and the role of employment in recovery from dependent drug use has often been described [15].

Although negative associations have also been drawn between drug use and job stability [12], this does not mean that active users of illicit drugs cannot work. Draus et al. [6] have outlined 3 conceptions of the working drug user: the 'stabilized junkie' [8], the 'working addict' [4] and the 'controlled user' [10]. Such ethnographic studies have drawn attention to the role of environmental conditions in shaping the character of income generating activity, and AOT may also alter whether employment is a realistic way of making money required to buy drugs as opposed to committing crime. However there has been relatively little research published about opiate users receiving AOT who are in full-time employment.

The aim of this study was to explore the triangulation between heroin use, agonist opioid treatment and employment (see figure 1) from the perspective of individuals who had recent experience of all three. This paper focuses on four research questions:

1. What impact does being employed have on illicit drug use? [Employment on heroin use]
2. Which factors promote and allow employment in individuals receiving AOT? [Drug use on employment]
3. What impact does AOT have on gaining and sustaining employment? [AOT on employment]
4. What effect does employment have on AOT and

longer-term recovery? [Employment on AOT]

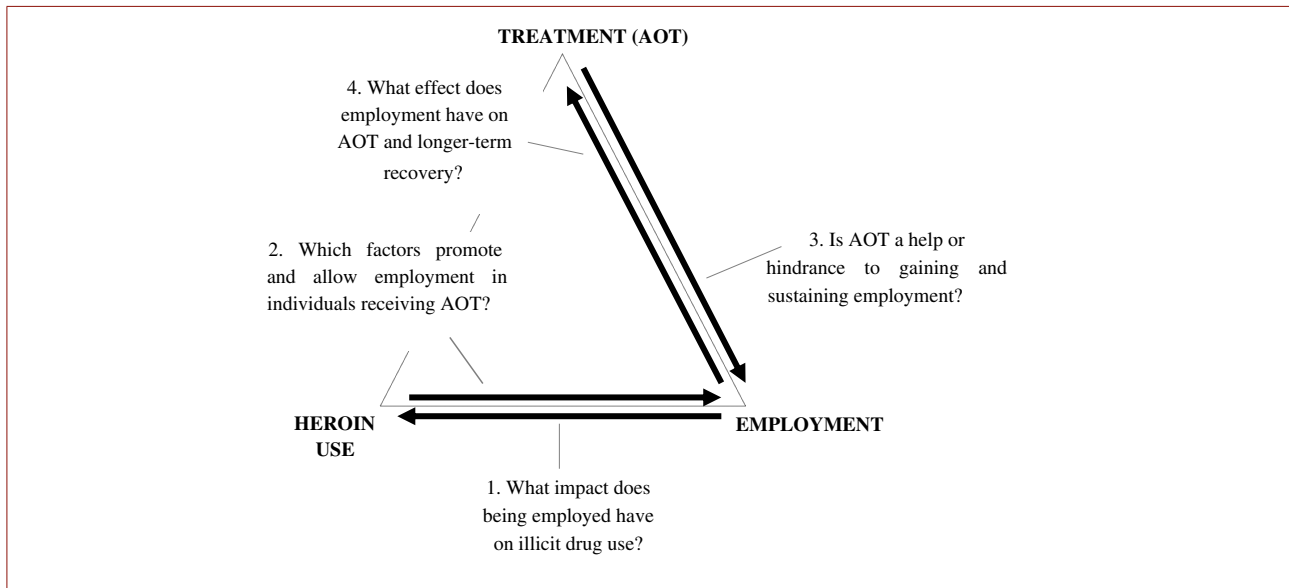
## 2. Methods

### 2.1. Setting and participants

The Solihull Integrated Addiction Service (SIAS) is a partnership between the Birmingham and Solihull Mental Health NHS Foundation Trust (BSM-HFT) and three non-governmental organisations (Aquarius, Welcome and Changes UK). Data from the National Drug Treatment Monitoring Service in November 2016 showed that 95 heroin-dependent clients receiving AOT were in full-time employment at SIAS. Participants had to be in employment (defined in this project as 10 or more full days of work in the past 20 working days), prescribed AOT for the past 30 days, 18 years or over, able to speak English, and be able to give informed consent to participate. The study received ethical approval from the NHS Research Ethics Committee (REC Reference: 16/SW/0319, IRAS ID: 217177) and the University BMedSci Research Ethics Committee (Reference: Y16\_C2\_17\_SJDL).

### 2.2. Procedure and analysis

All clinicians were informed about the study and asked to discuss it with clients receiving AOT at the next routine appointment and give them the participant information sheet. The client had until their next appointment to consider whether to take part in the study (minimum 48 hours). If the client agreed to participate, the larger, quantitative component of the study was completed and if the client was in employment the second, qualitative phase was described. A second appointment was made with a different researcher (OE) at a later date, and consent was re-taken for part 2 of the study. Within the limits of available resources, every eligible client who agreed to participate was approached whilst attending a routine appointment at SIAS. On average, clients had contact with their drug worker once a month, and consecutive clients were approached. Participants that were employed were largely recruited during twice-weekly evening clinics designed for people in work. Employment was defined as any paid or unpaid work (including paid sick or vacation days) in the last 30 days. Each participant received a £10 shopping voucher to reimburse them for their time. A total of 55 clients agreed to participate in the quantitative study, and a sub-sample of ten clients who reported working



**Figure 1.** The triangulation between the three elements of study; illicit heroin use, agonist opioid treatment and full-time employment

full-time were approached to participate in a semi-structured, face-to-face interview about experiences of employment.

Ten semi-structured, face-to-face interviews lasting 20-60 minutes were conducted in the treatment centre. A detailed topic guide directed the interviews, providing structure by listing planned prompts and probes to be utilised if required. The main headings were: Personal background; past and present employment history and income; past and present drug use & treatment; the interaction between drug use and employment (the effect of illicit drug use on work and vice versa); the interaction between AOT and employment (the effect of AOT on employment and vice versa); quality of life; and future goals. All the interviews were recorded using an encrypted dictaphone, and each recording was transcribed verbatim by the researcher in the days following the interview. The data were entered into the qualitative software programme NVIVO (version 11) for systematic coding using a coding frame developed iteratively from deductive codes (based on questions in the topic guide) and inductive codes (based on topics that emerged from the data during the coding process). Each interview transcript was reviewed line-by-line with all data being indexed to one or more codes. This process happened as soon as possible after each interview to allow editing of the topic guide to include new questions about themes that had emerged in the initial interviews in order to increase relevant data generation in the later interviews.

To address the aim of this paper, analyses were

confined to the codes relating to heroin use, agonist opioid treatment, employment and the interaction between these three factors. Data coded to these codes were exported into separate documents and analysed line-by-line using the process of Iterative Categorization [17] and following the principles of Framework [20]. Specifically, themes in the coded data were identified, the range and nature of the data within themes were mapped, and similarities and differences between participants were explored. Direct quotes were chosen to illustrate particular points and pseudonyms were used to protect identification.

### 3. Results

A summary of the ten participants is presented in Table 1. Participants were 90% male, had an age range of 30-48 and predominantly described their ethnicity as white British. The majority of their jobs involved low skill or skilled manual work. The length of time in treatment varied between 4 months and 15 years and current illicit drug use ranged from none to daily. The findings are presented under four headings that map on to our original study questions.

#### 3.1. What impact does being employed have on illicit drug use?

The perceived normality of the work environment appeared to benefit participants by reducing the amount of time they spent in contact with people who were actively using heroin or regularly committing

**Table 1.** Participant employment, treatment, drug use and criminal histories

Participant	Job	Job length	Medication	Length of treatment	Daily dose of medication	Medication collection frequency	Current heroin use	Criminal history (length of prison sentence)
Luke	Window cleaner	18 months	Methadone	3 years	50mg (reduced from 170mg)	Weekly	None	Prison for armed robbery (8yrs)
Tom	Warehouse operative/ shop steward	6 years/ 2 years	Methadone	5 years	80mg	Twice weekly	Approx. once/ month	Been to prison multiple times
Craig	Garden landscaping	3 months	Methadone	4 months	60mg (reduced from 90mg)	Weekly	Few days/ week	Been to prison multiple times
Paul	Painter/ decorator	Agency work	Methadone	11 years	60mg	Weekly	Uses most weekends	No criminal history
Ian	Factory assistant night manager	5 years	Buprenorphine	15 years	10mg (currently reducing 2mg/fortnight)	Weekly	None	Been to prison multiple times
Harry	Painter/ decorator	6 years	Methadone	13 years	40mg (reduced from 100mg/ day)	Weekly	None	No prison sentence but driving offences
Hannah	Kitchen van cook	Few years	Methadone	8 years	32mg	Weekly	None	No prison sentence but caution - shoplifting
Chris	Mentor	11 years	Buprenorphine	11 years	16mg	Weekly	Uses most weekends	Prison for intent to supply (2months)
James	Exhibition stand constructor	7 months	Buprenorphine	A long time	16mg	Daily	Most days	Been to prison 7 times
Elliot	Dog walker/ boarder	5 years	Methadone	7 years	32mg	Weekly	Once or twice a month	Prison for armed robbery when 21

crime. Employment therefore reduced the risk of illicit drug use by reducing the opportunity. This was especially true for participants whose current or past employment involved working away from the geographical area in which they lived or used their drugs. These participants reported that during the time spent working they would rarely think about drugs. Employment provided a structure to their lives which was seen as being beneficial for reducing or stopping drug use. Ian described a need for a highly structured

day in order to avoid the temptation to use heroin:

*It gives you routine, it constrains your time. It gives you a structure. You've got a family life and its work, home, and then you're at home at the weekend and with your kids and your missus...now it's finding the time for drugs, whereas before it was finding time to have a normal life. [IAN]*

He went on to say that he thought some form of structured activity like work should be compulsory as part of treatment, or offered as an alternative to



prison. However, another participant pointed out that jobs varied in how much free time they allowed the employee, and lack of supervision or contact with work colleagues would make using drugs during the day easier.

Although the structure that work provided was important, there was also a recognition that earning a regular wage made it more likely that you would be able to afford to use illicit drugs. Some participants coped with this because they had changed their life in other ways. Relationships, families, rent and food were now just as important as using drugs.

*It's definitely, I don't use in the day, it's mainly more a weekend thing at the moment. If I go on a blowout I would, I've got more money to do, to have a blowout but obviously I have to be at work and I have to maintain my life so that I do sort of have to be careful that I don't do it too much so. It has changed a lot over time, I mean it's only now that I only do it at weekends and in the week, just evenings, I'm sort of, I'm more controlled at the moment. [PAUL]*

### 3.2. Which factors promote and allow employment in individuals receiving AOT?

One important strategy that some participants described was the use of personal contacts to get a job, be this a family member, close friend or acquaintance. This route bypassed the conventional routes into employment that often worked against those using illicit drugs.

Some participants felt that they got their current jobs purely 'by chance', and some believed they should not have been offered the job in the first place. This was also a reason for them wanting to stay at their current job as they were unsure about whether if they left they would be able to get another.

*It was hard to get jobs. And then this one landed right. They needed someone at that time. So basically, if I'd gone for the job now I wouldn't get it. They do deep CRB [Criminal Records Bureau] checks and stuff...so back then it wasn't as strict so I got in by the skin of my teeth obviously back then. But now I don't know if I could get a job, no. [TOM]*

Acquiring work in this way often meant doing a job that you didn't particularly like doing. Even when participants secured a permanent position through merit, it was often in a low-skill job or on a temporary basis through an employment agency. Only after proving themselves to be capable and reliable workers were they offered a permanent position. Having taken jobs that were below their level of experience

or expertise, participants described a strong desire to succeed when eventually offered a job based on merit.

### 3.3. What impact does AOT have on gaining and sustaining employment?

Participants described how AOT both helped and hindered employment and employability. Many acknowledged that it was unlikely that they would be able to work without methadone or buprenorphine, as their use of illicit drugs would increase. Without prescribed medication they would be too physically ill to work, and many described the problems with needing to obtain drugs every day. This would make them unreliable at work, and they would eventually be sacked. There was agreement that prescribed opiates made the participants feel 'normal' and able to function at work, although one felt that medication sometimes made him drowsy. One participant's job was dependent on him remaining abstinent from heroin, forming a direct link between taking AOT and working. His employer wanted regular proof that he was attending treatment appointments, taking his medication and providing urine samples that didn't contain heroin.

However, AOT was also felt to be a barrier to future employment aspirations. The need to attend appointments and collect medication from a community pharmacy on a regular basis could be problematic, particularly if work took them away from home for any length of time. This could create a difficult dilemma, as missing work in order to secure or collect an AOT prescription caused difficulty with employers.

*Well, see, I've had to have Monday off and come here and get a prescription. Yeah so I've missed my work again and I've got to make up excuses and then go back the next and yeah it's caused hassle. I've found it doesn't really work best when you tell your employers. Not many employers are that, are that understanding. [PAUL]*

Problems often arose from not being able to acknowledge to their employer that they took AOT medication. One participant described how he was required to complete a urine drug test after an accident at work, and when the results returned positive for methadone he was dismissed as a result:

*The company that I was doing the job for, they were happy, they were alright about it but my company wasn't when they found out so...they were a bit old school so they were just like 'sack him'. But the company I was doing the job for were saying 'no, you should be helping him, he's trying to do some-*

*thing about it' and that's caused me hassle ever since. [PAUL]*

The perceived stigma surrounding AOT in the workplace had been experienced by many of the participants, and some felt it had been a barrier to them gaining employment in the past when applying for a job which required a baseline medical screening. Participants were reluctant to search for new employment opportunities or pursue other, more desired careers whilst receiving AOT. Most perceived that employers would force them to disclose what they were taking, and they would then stand less chance of getting the job.

*I was thinking about trying to get a management role at [COMPANY NAME] but they do tests, and they'd see my medication as well and I'd have to tell them. I just imagine they wouldn't be happy about that. It has held me back, but I would like to go on to do something else but I am a little, yeah I would say, it's holding me back. [CHRIS]*

Although targeting jobs that did not require much skill or did not have rigorous application processes was a route to gaining employment, it left individuals feeling frustrated.

*I've done meaningless jobs, do you know what I mean...easy, hands on jobs...it's functional, it's easy to do, it's not mind-tasking but I hate it [my job] because I know that I'm intelligent and really I should be doing a job that I enjoy and once I get clean I want to go back and study, do a degree and do something good with my life. [HANNAH]*

### 3.4. What effect does employment have on AOT and longer-term recovery?

Employment gave the participants a sense of living a 'normal life'. Their job gave them access to a social group with whom they had previously had limited interaction i.e. people with no criminal history, no protracted history of drug misuse and no experience of AOT. By observing the lives of their work colleagues, participants were encouraged to work for their recovery by complying with treatment and reducing heroin use.

Participants often described the stability employment imparted on their lives, mainly through receiving a regular wage and removing financial concerns. This enabled them to focus more on their treatment and their motivation for succeeding with it. Employment gave some participants a feeling of purpose, negated the need to commit crime, and ultimately allowed them to function as a regular mem-

ber of society. When exposed to this feeling of social integration and provided with a purpose and a goal to strive towards, they felt more motivated to stay in treatment.

*Yeah I think work helps me because it gives you a purpose. I think once you've made that decision to go on a script and you're on that journey of getting clean, you want to become a normal member of society. And we're expected to have a job, and we're expected to pay taxes and stuff like that. It's being part of the race, it's being a part of civilisation, isn't it you know? It's just being a part of, of belonging. You know, you're no longer on the outskirts, you know, you are part of it all aren't you? [HANNAH]*

However, only 4 of the 10 participants reported abstinence from heroin, and the others were still using heroin despite optimised doses of methadone or buprenorphine. Many of the participants described a dilemma surrounding AOT, heroin use and employment. Taking opioid medication provided stability and removed the absolute need to use illicit drugs every day. This in turn helped them to get up in the morning for work and to hold down a job. However, the income that work provided made drug use easier, negating the need to commit crime to make money. Furthermore, although AOT had enabled the work opportunities in the first place, the stigma associated with it then held people back and prevented them progressing in work.

*If I saw something, the opportunity, I mean I'd still probably go for that job as long as, you know, like [EMPLOYER'S NAME] would be difficult because of the testing but a job where I wouldn't then yeah. If I wasn't doing it at all I'd be...I mean...I'd probably jump more at the chance and just think I'll go for that, yeah, I'll go for that but I have to think about it and think 'oh will they take drug...', you know, 'what will they think, kind of thing'. But so it makes it harder but it wouldn't necessarily stop me from looking for another job. But it makes it more difficult though, depending on what job obviously you're going for. [CHRIS].*

Having a job allowed individuals to build other social structures in their life e.g. stable relationships and family support, housing, leisure activities. However, being dependent on the income to maintain this meant that an extended period of time to address residual drug problems and achieve stable abstinence was no longer available. For example, taking several weeks off to attend a residential rehabilitation facility was not an option whilst holding down a job.

*It's like I got a brick wall in front of me because*

*I need to be off drugs because I know to do it properly I have to be off drugs but to come off drugs you need money to pay the bills, you know? And I've not got that money to pay my bills. [CRAIG]*

Furthermore, it is also possible that having the AOT had removed the driver to make changes in an individual's life to resolve these problems. One participant was aware that she needed to work hard to not get complacent, describing how easy it was to carry on using illicit drugs if she was both working and receiving opioid medication.

*Yeah I'm ok if I go to NA. I keep myself round people in recovery, you have to, you have to change who you have it with, who you see, you have to get up and get out and keep busy and I've kind of knocked a lot of work on the head as well because the money's easy for me to use [on drugs], the money doesn't mean anything but if I'm not working that much then I won't use that much, that's just....and I need to connect to the meetings, I need to throw myself into recovery so I know what keeps me clean so I'm, I'm, I'm on that journey again, of getting clean again. [HANNAH]*

#### 4. Discussion

The UK has been very successful in expanding its AOT provision for people with heroin dependence, but recent policy changes have shifted the emphasis towards recovery (i.e. abstinence, good health and citizenship) [13]. It has also been noted that few people entering agonist opioid treatment move into employment [3]. Previous research has focussed on barriers to employment in people dependent on heroin or other opiates [1, 22]. Therefore this study set out to understand how it was that some people managed to work, and to explore the impact that employment had on their drug use and treatment.

The participants described the typical stresses and strains of opiate users, the cravings, and the difficulties breaking entrenched patterns of behaviour. Many participants said that AOT helped them reduce their drug use and gave them the opportunity to work. This group had overcome the barriers to employment by a combination of good fortune and choosing jobs that were below their capability or that required less rigorous health and safety checks. This was often at the expense of their own career, and most felt that once in employment that had little opportunity to progress whilst receiving AOT. However, they described the benefits that work brought them, including more financial security, the ability to make plans in their life, and new networks of friends and social oppor-

tunities.

Overall, this group felt that they had made progress in life since starting AOT, but they were now faced with two important new dilemmas. Firstly, although they often perceived their current employment situation to be better than that prior to starting treatment, they were unable to make further progress. Even if they stopped using heroin altogether, the fact that methadone or buprenorphine would appear in any drug test taken as part of an occupational health assessment meant that their job prospects were limited. Current best practice guidance in the UK [11] summarises the complex array of statutory regulations that employers have to comply with when considering drug use in their employees. Although it emphasises that '*employees with a drug problem should have the same rights to confidentiality and support as they would have if they had any other medical or psychological condition*' (page 11), this was not how participants in this study perceived the situation. Many felt that a positive drug test for a prescribed medication would lead to instant dismissal, and some had experienced this situation themselves. Furthermore, although this guidance applies to existing employees, participants anticipated no such understanding when applying for a new job in a competitive marketplace. They preferred jobs where a collective '*blind eye*' was turned to drug use, despite the potential safety implications associated with using psychoactive substances at work in some of these jobs.

Secondly, the majority of the sample were still using heroin and described how the AOT and the income derived from working had allowed them to pick and choose when they used. This felt better than the situation prior to entering treatment as their drug use was under their own control. However it is interesting to speculate what would happen to the level of illicit drug use if they lost their job through circumstances beyond their control e.g. national economic recession. There was also a question of whether the structure and demands of employment and the need to maintain their newly stabilised life meant that they didn't have time to fully address the drug use. A detoxification episode might take several weeks, and it wasn't easy to take this much time off. Current best practice advice notes that '*the cost of recruiting and training a replacement may be greater than the cost of allowing someone time off to get expert help*' [11], reflecting a difficult dilemma for employers as well as employees. Finally there is the possibility recognised by some participants, that work had protected them from 'hitting rock bottom' and the absolute need to



address their drug use.

## 5. Conclusions

Patients receiving AOT derive significant benefits from employment, even if they haven't stopped using illicit drugs completely. These findings suggest a different approach is required to help employed opiate users receiving AOT than for those who are unemployed. In particular, more work may be needed with employers to increase the understanding of AOT and overcome the stigma of drug use. Employers should encourage honest disclosure of substance use problems to allow their employees to develop and progress in their job roles. They may also need to allow appropriate leave from work to receive treatment.

## References

- Bauld L., Hay G., McKell, J. Carroll, C. (2010). *Problem drug users' experiences of employment and the benefit system*. London:
- Best D., George S., Day E. (2007): The Development of the Drug Treatment System in England. In: Day E. (Ed.) *Clinical Topics in Addiction*. RCPsych, London. pp. 14-28.
- Black, C. (2016). *An Independent Review into the impact on employment outcomes of drug or alcohol addiction, and obesity* London:
- Caplovitz D. (1976): The working addict. *Int J Sociol.* 6(4): 1-136.
- Dole V. P., Nyswander M. E. (1965): A medical treatment for diacetylmorphine (heroin) addiction - A clinical trial with methadone hydrochloride. *JAMA.* 193(8): 646-650.
- Draus P. J., Roddy J., Greenwald M. (2010): "I Always Kept a Job": Income Generation, Heroin Use and Economic Uncertainty in 21st Century Detroit. *J Drug Issues.* 40(4): 841-869.
- Eley S. (2007): Job Searching with A History of Drugs and Crime. *The Howard Journal of Criminal Justice.* 46(2): 162-175.
- Faupel C. E. (1987): Drug Availability, Life Structure, and Situational Ethics of Heroin Addicts. *Urban Life.* 15(3-4): 395-419.
- French M. T., Dennis M. L., McDougal G. L., Karuntzos G. T., Hubbard R. L. (1992): Training and employment programs in methadone treatment: Client needs and desires. *J Subst Abuse Treat.* 9(4): 293-303.
- Harling M. R. (2007): The place and meaning of 'controlled', illicit substance use in the private lives of a group of individuals. *J Subst Use.* 12(1): 1-12.
- Health and Safety Executive (2004): *Drug Misuse at Work*. HSE Books, Sudbury.
- Henkel D. (2011): Unemployment and substance use: A review of the literature (1990-2010). *Curr Drug Abuse Rev.* 4: 4-27.
- HM Government. (2010). *Drug Strategy 2010. Reducing Demand, Restricting Supply, Building Recovery: Supporting People to Live a Drug Free Life*. London:
- Klee H., McLean I., Yavorsky C. (2002). *Employing drug users: Individual and systemic barriers to rehabilitation*. Joseph Rowntree Foundation, York
- McIntosh J., Bloor M., Robertson M. (2008): Drug treatment and the achievement of paid employment. *Addict Res Theory.* 16(1): 37-45.
- Modini M., Joyce S., Mykletun A., Christensen H., Bryant R. A., Mitchell P. B., Harvey S. B. (2016): The mental health benefits of employment: Results of a systematic meta-review. *Australas Psychiatry.* 24(4): 331-336.
- Neale J. (2016): Iterative categorization (IC): a systematic technique for analysing qualitative data. *Addiction.* 111: 1096-1106.
- Parmenter J., Mitchell C., Keen J., Oliver P., Rowse G., Neligan I., Keil C., Mathers N. (2013): Predicting biopsychosocial outcomes for heroin users in primary care treatment: a prospective longitudinal cohort study. *Brit J Gen Pract.* 63(612): e499-e505.
- Platt J. J. (1995): Vocational Rehabilitation of Drug Users. *Psychol Bull.* 117(3): 416-433.
- Ritchie J., Spencer L. (1994): Qualitative data analysis for applied policy research. In: Bryman A., Burgess R. G. (Eds.): *Analysing qualitative data*. Routledge, London. pp. 173-194.
- Sumnall H. R., Brotherhood A. (2012). *Social reintegration and employment: evidence and interventions for drug users in treatment* Luxembourg:
- Sutton L., Cebulla A., Heaven C., Smith N. (2004). *Drug and alcohol use as barriers to employment : a review of the literature. CRSP research report; 499s*. Loughborough:
- UK Drug Policy Commission Recovery Consensus Group. (2008). *A Vision of Recovery*. London:
- Waddell, G., & Burton, A. K. (2006). *Is work good for your health and well-being?* Retrieved from London:
- Widman M., Lidz V., Digregorio G. J., Platt A. K., Robison L., Platt J. J. (2000): Health status of employed and unemployed methadone patients. *J Subst Abuse Treat.* 18(3): 287-289.
- Zanis D. A., Metzger D. S., McLellan A. T. (1994): Factors associated with employment among methadone patients. *J Subst Abuse Treat.* 11(5): 443-447.

## Acknowledgements

None

## Role of the funding source

This work was funded and sponsored by the University of Birmingham through a research grant from the Population Sciences and Humanities Intercalated BMed-Sci programme. It was supported by the Birmingham and Solihull Mental Health Foundation Trust. No additional funding or support was received to support the writing or

preparation of this paper.

#### *Contributors*

All authors were involved in the study design, had full access to the survey data and analyses, and interpreted the data, critically reviewed the manuscript and had full control, including final responsibility for the decision to submit the paper for publication

#### *Conflict of interest*

Authors declared no conflict of interest.

#### *Ethics*

Authors confirm that the submitted study was conducted according to the WMA Declaration of Helsinki -

Ethical Principles for Medical Research Involving Human Subjects. This study has ethics committee approval. All patients gave their informed consent to the study.

*Received December 22, 2017 - Accepted June 10, 2018*